PATENT COOPERATION TREATY

PCT

Rec'd PCT/PTO 06 MAY 2005

INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

(Chapter II of the Patent Cooperation Treaty)

(PCT Article 36 and Rule 70)

Applicant's or agent's file reference 2021700PC/ko	**FOR FURTHER ACTION** See Form PCT/IPEA/416	
International application No. PCT/FI 2002/000877	International filing date *(day/month/year)* 08.11.2002	Priority date *(day/month/year)*
International Patent Classification (IPC) or national classification and IPC H04Q 7/38		
Applicant NOKIA CORPORATION et al		

1. This report is the international preliminary examination report, established by this International Preliminary Examining Authority under Article 35 and transmitted to the applicant according to Article 36.
2. This REPORT consists of a total of 4 sheets, including this cover sheet.
3. This report is also accompanied by ANNEXES, comprising:

   a. ☐ *(sent to the applicant and to the International Bureau)* a total of _____ sheets, as follows:

      ☐ sheets of the description, claims and/or drawings which have been amended and are the basis of this report and/or sheets containing rectifications authorized by this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions).

      ☐ sheets which supersede earlier sheets, but which this Authority considers contain an amendment that goes beyond the disclosure in the international application as filed, as indicated in item 4 of Box No. I and the Supplemental Box.

   b. ☐ *(sent to the International Bureau only)* a total of (indicate type and number of electronic carrier(s))

      _____, containing a sequence listing and/or tables related thereto, in computer readable form only, as indicated in the Supplemental Box Relating to Sequence Listing (see Section 802 of the Administrative Instructions).

4. This report contains indications relating to the following items:

   ☒ Box No. I Basis of the report
   ☐ Box No. II Priority
   ☐ Box No. III Non-establishment of opinion with regard to novelty, inventive step and industrial applicability
   ☐ Box No. IV Lack of unity of invention
   ☒ Box No. V Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
   ☐ Box No. VI Certain documents cited
   ☐ Box No. VII Certain defects in the international application
   ☐ Box No. VIII Certain observations on the international application

Date of submission of the demand	Date of completion of this report
26.04.2004	19.01.2005
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Form PCT/IPEA/409 (cover sheet) (January 2004)

INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

International application No.
PCT/FI 2002/000877

Box No. I Basis of the report

1. With regard to the **language**, this report is based on the international application in the language in which it was filed, unless otherwise indicated under this item.

☐ This report is based on a translation from the original language into the following language _____, which is the language of a translation furnished for the purposes of:

☐ international search (under Rules 12.3 and 23.1(b))
☐ publication of the international application (under Rule 12.4)
☐ international preliminary examination (under Rules 55.2 and/or 55.3)

2. With regard to the **elements** of the international application, this report is based on *(replacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this report as "originally filed" and are not annexed to this report):*

☒ the international application as originally filed/furnished

☐ the description:

pages _____ as originally filed/furnished
pages* _____ received by this Authority on _____
pages* _____ received by this Authority on _____

☐ the claims:

pages _____ as originally filed/furnished
pages* _____ as amended (together with any statement) under Article 19
pages* _____ received by this Authority on _____
pages* _____ received by this Authority on _____

☐ the drawings:

pages _____ as originally filed/furnished
pages* _____ received by this Authority on _____
pages* _____ received by this Authority on _____

☐ a sequence listing and/or any related table(s) – see Supplemental Box Relating to Sequence Listing.

3. ☐ The amendments have resulted in the cancellation of:

☐ the description, pages _____
☐ the claims, Nos. _____
☐ the drawings, sheets/figs _____
☐ the sequence listing *(specify)*: _____
☐ any table(s) related to the sequence listing *(specify)*: _____

4. ☐ This report has been established as if (some of) the amendments annexed to this report and listed below had not been made, since they have been considered to go beyond the disclosure as filed, as indicated in the Supplemental Box (Rule 70.2(c)).

☐ the description, pages _____
☐ the claims, Nos. _____
☐ the drawings, sheets/figs _____
☐ the sequence listing *(specify)*: _____
☐ any table(s) related to the sequence listing *(specify)*: _____

* *If item 4 applies, some or all of those sheets may be marked "superseded."*

INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

International application No.
PCT/FI 2002/000877

Box No. V **Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement**

1. Statement

Novelty (N)	Claims	1-16	YES
	Claims		NO
Inventive step (IS)	Claims		YES
	Claims	1-16	NO
Industrial applicability (IA)	Claims	1-16	YES
	Claims		NO

2. Citations and explanations (Rule 70.7)

The claimed invention

The present invention relates to reducing load in a mobile communication system by selecting and triggering non real-time users to perform cell reselection based on cell load parameter.

The following documents were cited in the International Search Report:

D1: TOLLI A. ET AL.: 'Performance evaluation of common radio resource management (CRRM)', IEEE INTERNATIONAL CONFERENCE ON COMMUNICATIONS, 2002. ICC 2002 vol. 5, 2002, pages 3429 -3433,
D2: US6363252 B1
D3: US5497504 A

D1 describes that a non-real-time user is directed to another system (or layer or frequency) by inter-system network controlled cell reselection if the cell throughput is below threshold, (page 3429, column 2).

D2 relates to a method of performing a handover. For a group of potential new base stations, the carrier to interference ratio (abstract) and load factors (column 4 lines 44-55) are calculated with respect to both real-time and non-real-time transmissions.

D3 describes admission or rejection of connections based on the number of connections of each quality class in the cell-cluster, (abstract).

.../...

Supplemental Box

In case the space in any of the preceding boxes is not sufficient.
Continuation of: Box V

Reasoned statement

What is claimed in claims 1, 2, 4, 7-9, 11 and 14-16 differs from D1 in the selection of the non-real time users to perform cell selection.

To a person skilled in the art, it is known that some users are selected to perform a cell reselection or a hand-over when the load is high, see D1 page 3430, column 2, paragraph 4.

Accordingly, a person skilled in the art knowing as a starting point that a non-real-time user performs a cell reselection based on high delay, would obviously use the selection of users to reduce load in a present cell meanwhile keep the load in the other cell at an acceptable level.

Therefore, the invention according to claims 1, 2, 4, 7-9, 11 and 14-16 is considered to lack an inventive step.

What is claimed in claims 3, 5, 6, 10, 12 and 13 is considered to show constructional details, which do not involve an inventive step.